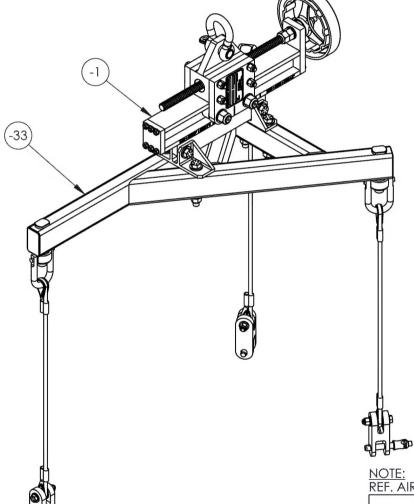
	ASSY QTY	ASSY QTY	ASSY	ASSY	ASSY QTY	ASSY QTY	ASSY QTY	ASSY QTY	B/O	Part #	UNIT	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	QIII	α	QIII	Q I I	311	QIII	311	X		-1	1	SLING ASSEMBLY			2
							Χ	1		-3		BEAM WELDMENT			3
							1			-5		BEAM	1018/1020 CR		4
							1			-7		BEAM MOUNT BAR	1018/1020 CR		5
						Х		1		-9		SLING BLOCK/CRANK ASSY			6
					Χ	1				-11		SLING BLOCK ASSEMBLY			7
4					1					-13		SLING BLOCK	1018/1020 CR		8
\dashv					2					-15 -17		SIDE PLATE ACME SLEEVE NUT	1018/1020 CR BRONZE	5/8-8 (ROTON #89407) MODIFIED	9
\dashv					'	1				-17		END PLATE	A36/1018/1020 HR	3/0-6 (ROTON #07407) MODIFIED	11
				Χ		1				-21		CRANK END PLATE ASSEMBLY	7,007 TOTO/ TOZO TIK		12
				1						-23		CRANK END PLATE	A36/1018/1020 HR		13
			Χ			1				-25		ACME ROD ASSEMBLY			14
			1							-27		ACME ROD	STEEL	5/8-8 X 14-3/4 (MCMASTER-CARR #93410A620) MODIFIED	15
			1							-29		ACME ATTACHMENT	4140/4142		16
						1				-31		HANDWHEEL	PLASTIC W/ STEEL HUB	(CARRLANE #CL-62-HWAS-P) MODIFIED	17
		Χ								-33	1	FRAME ASSEMBLY			18
	Χ	1								-35		FRAME WELDMENT			19
4	1									-37		TUBE A	A500		20
4	1									-39		TUBE B	A500		21
\dashv	1									-41		TUBE C	A500		22
\dashv	1	3								-43 -45		TUBE D BUSHING	A500 1018/1020 CR		23
\dashv		1								-43		SMALL MOUNT BRACKET	A36/1018/1020 CR		25
+		1								-49		LONG MOUNT BRACKET	A36/1018/1020 HR		26
+		3								-51		CABLE ASSEMBLY	7,007,1010,10201110		27
1									B/O	-53		CABLE	STEEL	Ø5/16 X 30 (MCMASTER-CARR #3440T57)	27
1									B/O	-55		LIFTING THIMBLE	STEEL	13/16 X 1-1/2, Ø5/16 ROPE (MCMASTER-CARR #3494T14)	27
1									B/O	-57		COMPRESSION SLEEVE	COPPER	Ø5/16 ROPE (MCMASTER-CARR #3898T19)	27
									B/O	-59		HOIST RING	STEEL	12-13 X 1-1/16 X 4-7/8 (MCMASTER-CARR #3145T23)	27
		3								-61		LINK	4140/4142		16
_					4				B/O	-63		HEX HEAD CAP SCREW	STEEL GRD 8	3/8-24 X 4-1/4 (MCMASTER-CARR #91257A141)	26
4					8	1			B/O	-65		FLAT WASHER	STEEL	Ø3/8 (MCMASTER-CARR #95229A490)	25
1					4	1			B/O	-67		NYLON-INSERT LOCKNUT	STEEL	3/8-24 (MCMASTER-CARR #97135A235)	27
					8				B/O	-69		POINT SET SCREW	STEEL	1/4-28 X 1/4 (MCMASTER-CARR #92695A311)	7
+					4				B/O B/O	-71 -73		TRACK ROLLER FLAT WASHER	STEEL	5/8-18 X 3/4 X 1-1/2 STUD X Ø1-1/2 X 7/8 (MCMASTER-CARR #3652K23) Ø5/8 (MCMASTER-CARR #95229A610)	7
\dashv					4				B/O	-75		NYLON-INSERT LOCKNUT	STEEL STEEL	5/8-18 (MCMASTER-CARR #97135A275)	7
+				1	7				B/O	-77		NEEDLE ROLLER BEARING	STEEL	Ø5/8 I.D. X Ø13/16 O.D. X 5/8 (MCMASTER-CARR #5905K25)	12
1								12	B/O	-81		HEX HEAD CAP SCREW	STEEL	1/4-28 X 1 (MCMASTER-CARR #92620A564)	2
1								12	B/O	-83		FLAT WASHER	STEEL	Ø1/4 (MCMASTER-CARR #95229A430)	2
1						2			B/O	-85		THRUST NEEDLE BEARING	STEEL	Ø5/8 I.D. X Ø1-1/8 O.D. X 5/64 (MCMASTER-CARR #5909K32)	2
1						4			B/O	-87		THRUST BEARING WASHER	STEEL	Ø5/8 I.D. X Ø1-1/8 O.D. X .032 (MCMASTER-CARR #5909K45)	2
						2			B/O	-89		ACME NUT	S.S.	5/8-8 ACME THREAD (MCMASTER-CARR #95066A213)	2
Ţ						1			B/O	-91		SQUARE KEY	STEEL	1/8 X 1 (MCMASTER-CARR #98870A110)	2
		3							B/O	-93		QUICK RELEASE PIN	S.S.	ØM12 X 50mm USABLE (MCMASTER-CARR #93871A880)	18
1		3							B/O	-95		HEX HEAD CAP SCREW	STEEL	3/8-16 X 2-1/4 (MCMASTER-CARR #91257A633)	18
4		6							B/O	-97		FLAT WASHER	STEEL	Ø3/8 (MCMASTER-CARR #98023A031)	18
		3							B/O	-99		NYLON INSERT LOCKNUT	STEEL	3/8-16 (MCMASTER-CARR #97135A230)	18
+		2							B/O B/O	-101 -103		HEX HEAD CAP SCREW HEX HEAD CAP SCREW	STEEL STEEL	1/2-13 X 4 (MCMASTER-CARR #91257A728)	18
+		12							B/O	-105		FLAT WASHER	STEEL	1/2-13 X 2-1/4 (MCMASTER-CARR #91257A721) Ø1/2 (MCMASTER-CARR #98023A033)	18
+		6							B/O	-107		NYLON-INSERT LOCKNUT	STEEL	1/2-13 (MCMASTER-CARR #97135A250)	18
+	3								2,0	-109		TUBE CAP	A36/1018/1020 HR		29
1		3							B/O	-115		CABLE TAB	ALUMINUM	(CARR LANE CL129-TAB-A)	18
1		3						4	B/O	-117		#2 DRIVE SCREW	STEEL	#2 X 1/4 (MCMASTER-CARR #90081A077)	18
t		3							B/O	-119		LANYARD	COATED STEEL	Ø1/16 X 10 (CARR LANE #CL-2-C)	N/5
1		6							B/O	-121		FERRULE	ALUMINUM	Ø1/16 X 3/8 (MCMASTER-CARR #3896T31)	N/S
J								1	B/O	-123		SCREW PIN SHACKLE	S.S.	Ø3/4 PIN 2 TON (MCMASTER-CARR #3583T16)	2
1								'						\$374 FIN 2 TON (INCMASIEN-CARR #3363116)	\vdash
	1								B/O B/O	-125		DECAL DART PLACARD	BLACK VINYL ALUMINUM	(SIGNS NOW) RB41011	30

		REVISIONS			
SEA	ECR	DESCRIPTION	DATE	INITIAL	APPROVE
1		RELEASED FOR PRODUCTION	8/4/2016	SM	JAG
2	16-0221	-1 ADDED -123 QTY 1 & -117 QTY 4 TO ASSEMLBY. DELETED -65, -67, -85, -87, -89, -91, -111, -113 FROM ASSEMBLY, -3 CH'D NOTE FROM FILL W/ BLACK INK TO FILL W/ RED PAINT9 ADDED -65, -67, -85, -87, -89, -91 TO ASSEMBLY, -13 CH'D DIMS FROM Ø.755 THRU ALL ✓ Ø.98 X 90° BOTH SIDES TO Ø.875 THRU ALL ✓ Ø.98 X 90° BOTH SIDES, FROM Ø.1.125-1.129 THRU ALL ✓ Ø.18 X 90°, BOTH SIDES TO Ø.1.125-1.129 THRU ALL ✓ Ø.18 X 90°, BOTH SIDES TO Ø.1.125-1.129 THRU ALL ✓ Ø.18 X 90°, BOTH DIDES TO Ø.1.125-1.129 THRU ALL ✓ Ø.18 X 90°, BOTH SIDES TO Ø.1.125-1.129 THRU ALL ✓ Ø.18 X 90°, BOTH DIDED TO ASSEMBLY15 CH'D DIM WAS 3.525 IS 2X 3.525. ADDED DIMS 2X .91, 2X 1.704, 2X .28, 2X 2.954, 4X Ø.086 ₹ 31, 97, 2.360. DELETED DIM 2.32319 ADDED DIMS 2X .610. CH'D MATL FROM TO 1018/1020 CR TO A36/1018/1020 HR23 CH'D MATL FROM 1018/1020 CR TO A36/1018/1020 HR23 CH'D MATL FROM 1018/1020 CR TO A36/1018/1020 HR23 CH'D MATL FROM SIDES TO A36/1018/1020 HR25 DELETED DIMS 365, Ø.1869-1874 THRU ALL [F79], CH'D FINISH FROM ZINC PLATE ASTM B633 TYPE I SC2 TO SEE -2529 DELETED DIMS 375, Ø.1890-1902 THRU ALL [S. F79], ADDED DIM. 10 X 45°. CH'D MATL FROM 4140 Q&T/4142 Q&T TO 4140/4142. CH'D FINISH WAS ZINC PLATE ASTM B633 TYPE I SC2 IS SEE -2533 CORRECTED ORIENTATION OF -35. ADDED -125 DECAL TO ASSY35. ADDED DIM. 174-L05. CH'D DIMS WAS 2.675 IS [2.675]. ADDED -109 TO ASSY37, -39, -41, -43 CH'D MATL WAS A36/1018/1020 HR IS A50061 CH'D MATL WAS 1018/1020 CR IS 4140/4142. ADDED DIM 1.47±.05. CH'D DIMS WAS 5.08 IS .51. WAS Ø.095098 ▼ 1.5 IS Ø.086 ▼ 3179 DELETED FROM BOM109 ADDED DRAWING. CH'D MATL WAS POLYETHYLENE IS A36/1018/1020 HR WAS SIDES TO BOM ON THE PROMBOM109 ADDED DRAWING. CH'D MATL WAS POLYETHYLENE IS A36/1018/1020 DRAWING. CH'D MATL WAS POLYETHYLENE IS A36/1018/1020 DRAWING. CH'D MATL WAS POLYETHYLENE IS A36/1018/1020 DRAWING.	11/15/2016	DPD	JAG



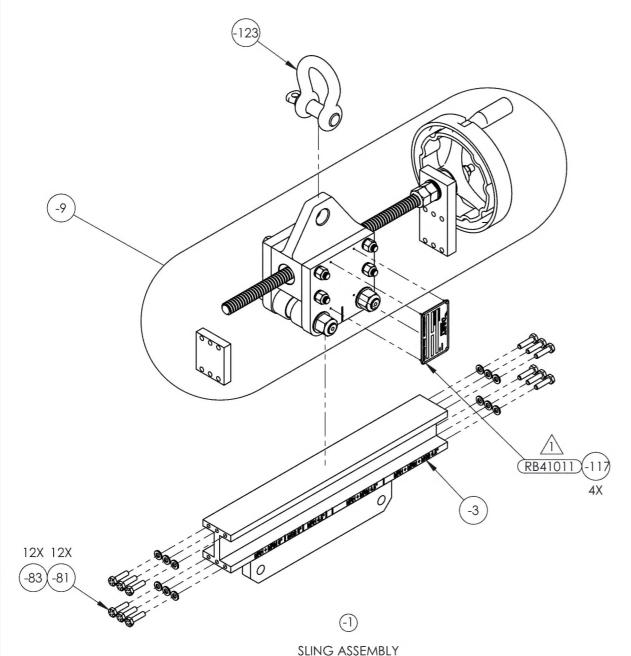
NOTE: REF. AIRBUS T/N M622U1005130.

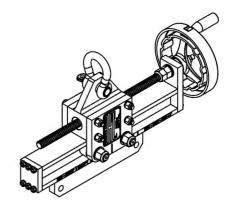
MAIN ROTOR HEAD SLING

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .005 FRACTIONS ± 1/8
.XX ± .01 ANGLES ± .5°
.X ± .1 SURFACES = 125/
1. BREAK ALL SHARP EDGES
.015 x 45 ° OR .015 c
2. DIMENSIONAL LIMITS APPLY
AFTER PLATING
3. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009 RBEM622U1005103 DRAWN BY: CLOUGH
CHECKED: MACKOVJAK OPPS APPR: ANDERSON
QA APPR: LINDSAY
APPROVED: GILBERT
SCALE 1:8 DATE USED ON MODEL H175 DATE 5/13/2016

SHEET 1 OF 31

	REVISIONS								
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED				
2		-1 ADDED -123 QTY 1 & -117 QTY 4 TO ASSEMLBY, DELETED -65, -67, -85, -87, -89, -91,-111, -113 FROM ASSEMBLY.	11/15/2016	DPD	JAG				





NOTE:

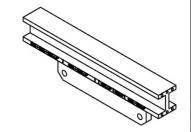
ENGRAVE PLACARD (RB41011) WITH T/N, S/N, "MADE IN USA" AND "SAFE WORKING LOAD 2039 LBS/925 KG".

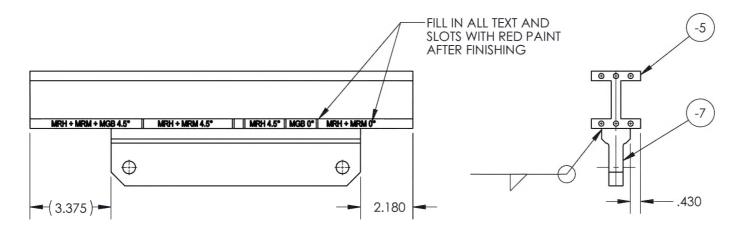


MAIN ROTOR HEAD SLING

DWG NO.	RBE	M62	22L	110051	03-1	2	
MAT'L HEAT TREAT FINISH SPEC				DIME .XXX ± .005 .XX + .01 .X ± .1 1. BREAK AL	ANGLES ±.5° SURFACES = 125 L SHARP EDGES	,	
DRAWN BY: CHECKED:	CLOUGH			.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING			
OPPS APPR: ANDERSON				3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009			
QA APPR: LINDSAY APPROVED: GILBERT				USED ON MODEL			
			H175				
SCALE	1:5	DATE	5/1	3/2016	SHEET 2 OF 3	1	

	REVISIONS .							
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED			
2	16-0221	-3 CH'D NOTE FROM FILL W/ BLACK INK TO FILL W/ RED PAINT.	11/15/2016	DPD	JAG			







TITLE

MAIN ROTOR HEAD SLING

DWG NO

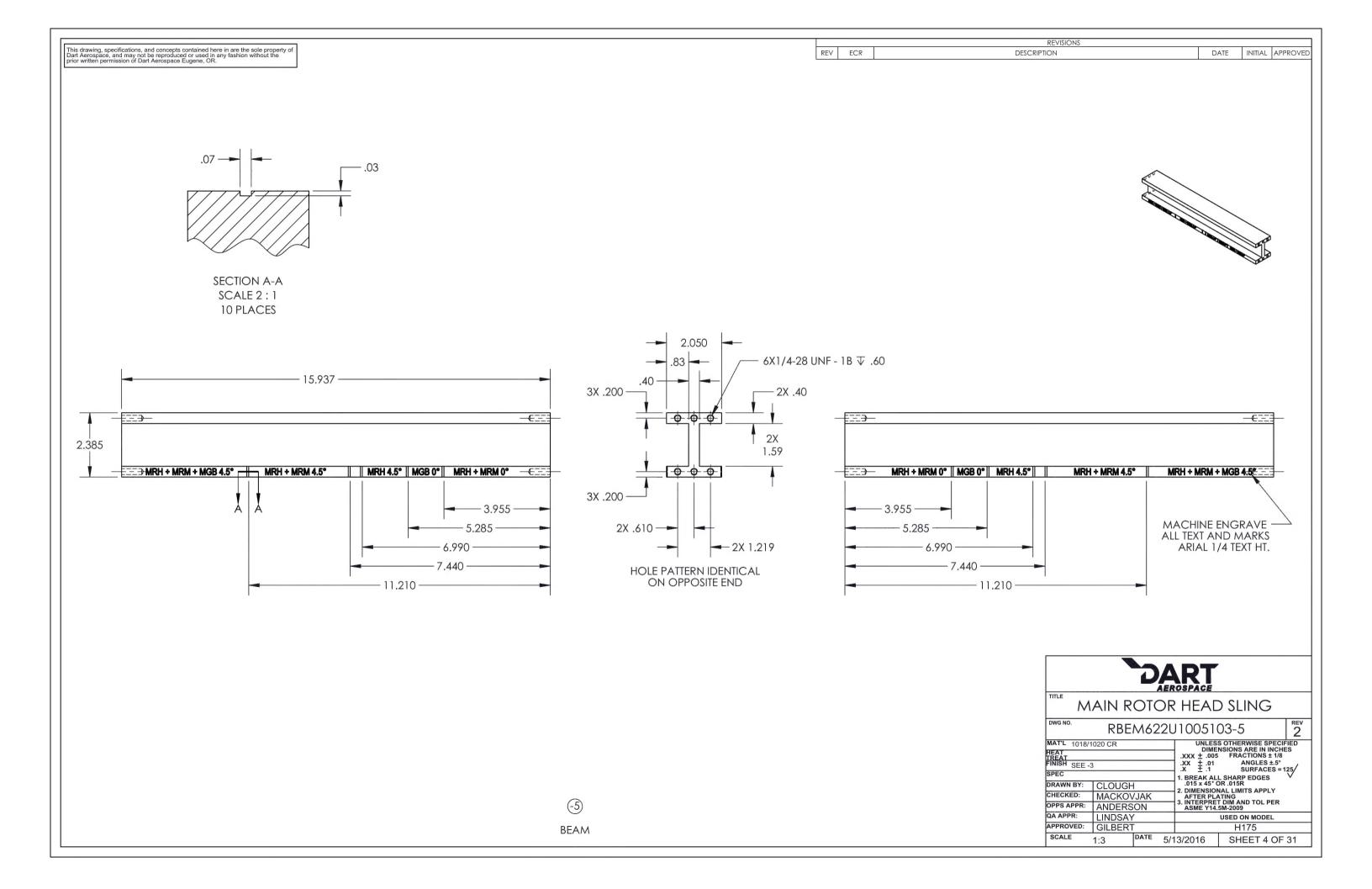
RBEM622U1005103-3

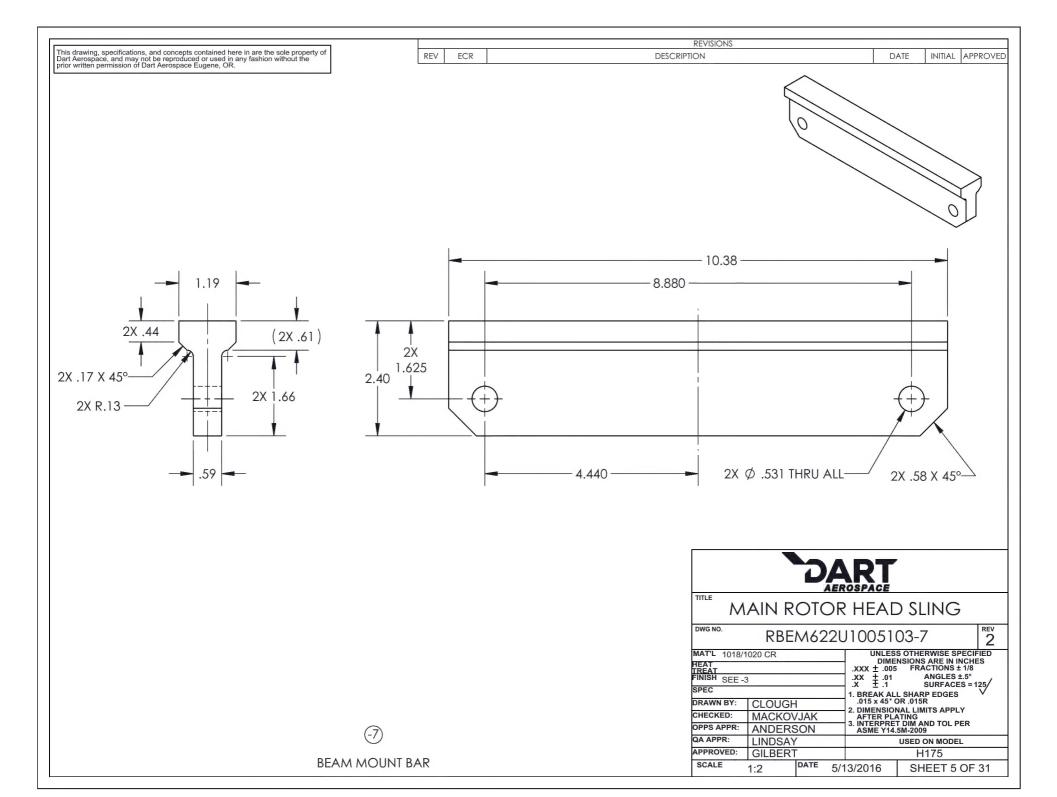
2

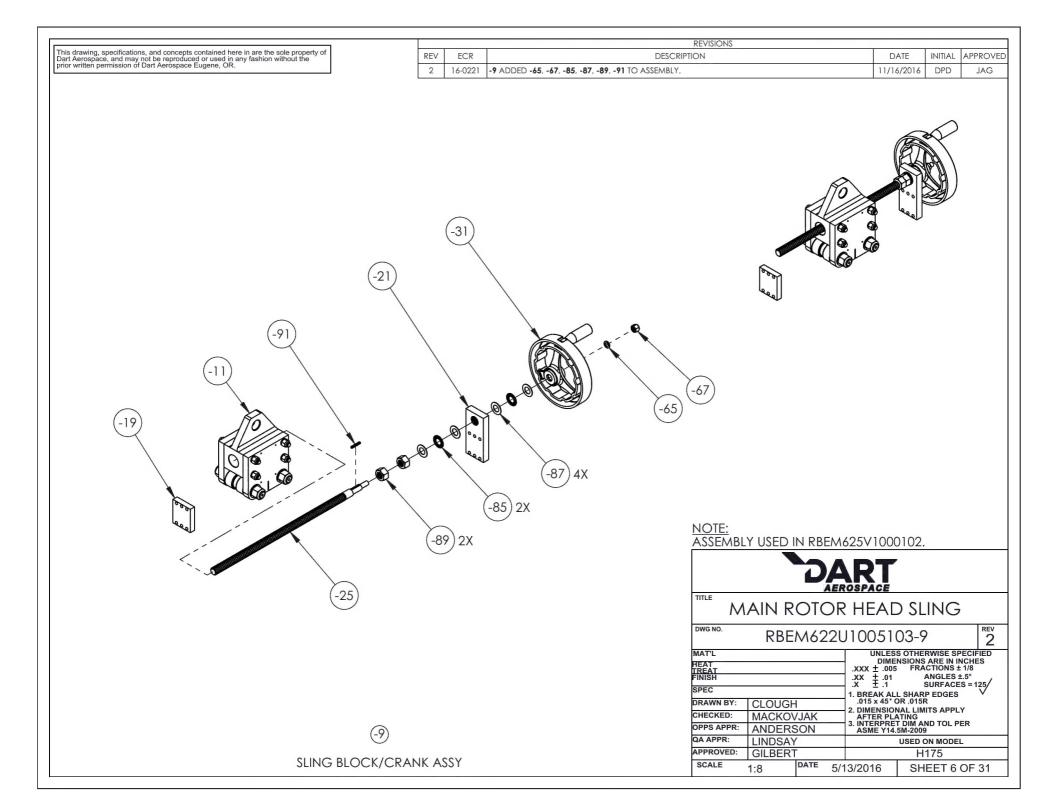
MAT'L HEAT TREAT			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8				
FINISH ZINC	PLATE		.XX ± .03	ANGLES ±1° SURFACES = 125/			
SPEC ASTN	1 B633 TYPE I S	SC 2	1. BREAK ALL SHARP EDGES				
DRAWN BY:	CLOUGH		.015 x 45° (OR .015R NAL LIMITS APPLY			
CHECKED:	MACKOVJ	JAK	AFTER PLA	ATING			
OPPS APPR:	ANDERSO	N	ASME Y14.	T DIM AND TOL PER 5M-2009			
QA APPR:	LINDSAY			USED ON MODEL			
APPROVED:	GILBERT			H175			
SCALE	1./	DATE 5/	13/2016	SHEET 3 OF 31			

(-3)

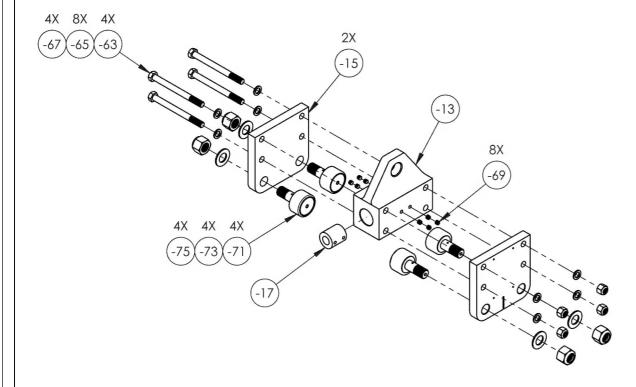
BEAM WELDMENT

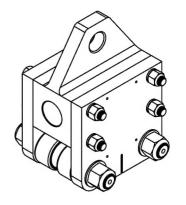






REVISIONS INITIAL APPROVED REV ECR DESCRIPTION DATE





DWG NO.

MAIN ROTOR HEAD SLING

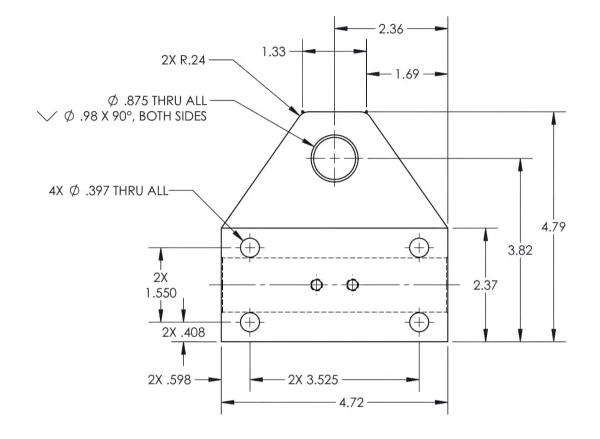
RBEM622U1005103-11 MAT'L UNLESS OTHERWISE SPECIFIED SURFACES = 125/ SPEC DRAWN BY:

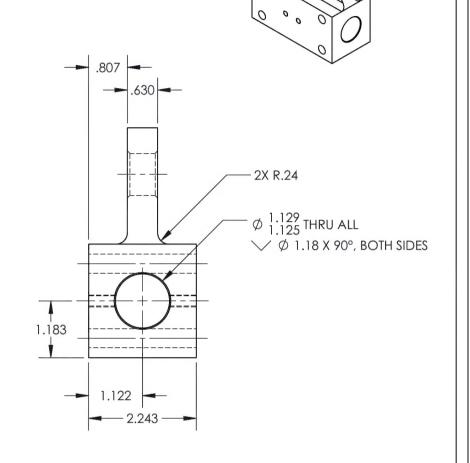
1. BREAK ALL SHARP EDGES .015 x 45 'OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 CLOUGH CHECKED: MACKOVJAK OPPS APPR: ANDERSON

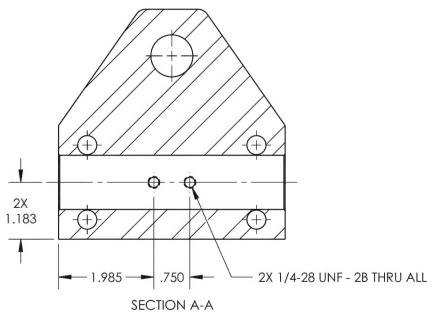
QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT H175 SCALE 5/13/2016 SHEET 7 OF 31 1:6

SLING BLOCK ASSEMBLY

	REVISIONS .								
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED				
2		-13 CH'D DIMS FROM Ø.755 THRU ALL ✓ Ø.80 X 90°, BOTH SIDES TO Ø.875 THRU ALL ✓ Ø.98 X 90° BOTH SIDES, FROM Ø1.126-1.129 THRU ALL ✓ Ø1.18 X 90°, BOTH SIDES TO Ø1.125-1.129 THRU ALL ✓ Ø1.18 X 90°, BOTH SIDES.	11/15/2016	DPD	JAG				







(-13)

SLING BLOCK

DART MAIN ROTOR HEAD SLING RBEM622U1005103-13 UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX ± .01 ANGLES ± .5°

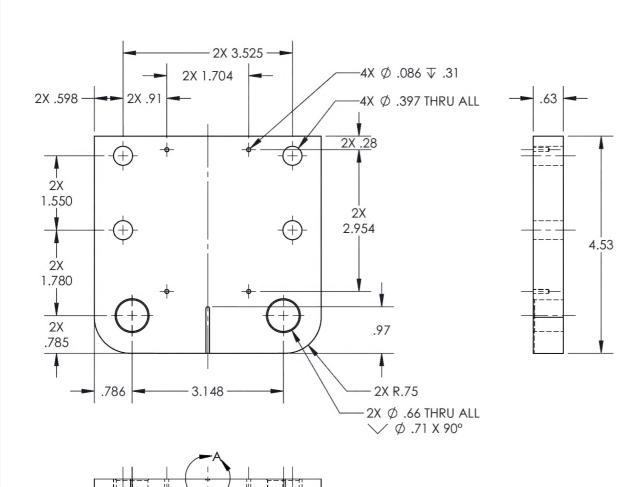
.X ± .1 SURFACES = 125/

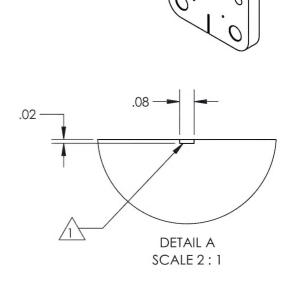
1. BREAK ALL SHARP EDGES

2. DIMENSIONAL LIMITS APPLY
AFTER PLATING
3. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009 MAT'L 1018/1020 CR HEAT TREAT FINISH ZINC PLATE SPEC ASTM B633 TYPE I SC 2 DRAWN BY: CLOUGH CHECKED: MACKOVJAK OPPS APPR: ANDERSON
QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT H175 SCALE DATE 5/13/2016 1:2 SHEET 8 OF 31

2.360

	REVISIONS REVISIONS									
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED					
2	16-0221	-15 CH'D DIM WAS 3.525 IS 2X 3.525. ADDED DIMS 2X .91, 2X 1.704, 2X .28, 2X 2.954, 4X Ø.086 $\mathbf{\nabla}$.31, .97, 2.360. DELETED DIM 2.323.	11/15/2016	DPD	DPD					





NOTE:

MACHINE ENGRAVE CENTERING MARK. FILL CENTERING MARK WITH BLACK PAINT.

DART

MAIN ROTOR HEAD SLING

DWG NO	RBEM622	2U1005103-15	F
MAATI	4040/4000 CD	TIME EGG OTHERWISE CREA	TIETE

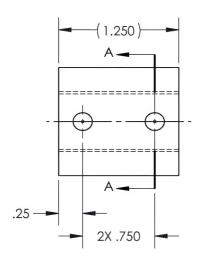
MAT'L 1018/1	020 CR			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
HEAT TREAT	HEAT TREAT FINISH ZINC DLATE				FRACTIONS ± 1/8			
FINISH ZINC F	PLATE			.XX ± .01 .X ± .1	ANGLES ±.5° SURFACES = 125/			
SPEC ASTM	B633 TYPE I	SC 2		1. BREAK ALI	K ALL SHARP EDGES			
DRAWN BY:	CLOUGH			.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY				
CHECKED:	MACKOV	/JAK		AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009				
OPPS APPR:	ANDERS	SON						
QA APPR:	LINDSAY	′			USED ON MODEL			
APPROVED:	GILBERT				H175			
SCALE	1:2	DATE 5/1		13/2016	SHEET 9 OF 31			

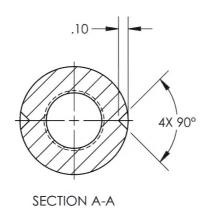
(-15

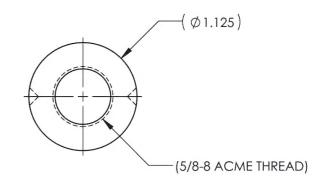
SIDE PLATE

	REVISIONS							
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED			











MAT'L BRONZE

MAIN ROTOR HEAD SLING

RBEM622U1005103-17

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX + .01 ANGLES ± .5°

.X ± .1 SURFACES = 125/

SPEC DRAWN BY: CLOUGH

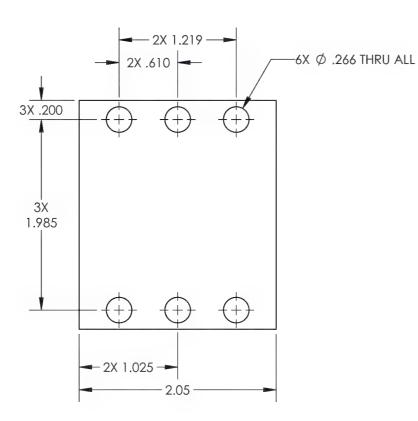
1. BREAK ALL SHARP EDGES .015 x 45 'OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 CHECKED: MACKOVJAK OPPS APPR: ANDERSON QA APPR:

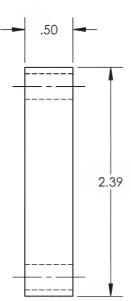
LINDSAY USED ON MODEL APPROVED: GILBERT H175 SCALE 1:1 5/13/2016 **SHEET 10 OF 31**

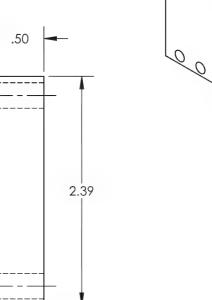


ACME SLEEVE NUT

	REVISIONS							
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED			
2	16-0221	-19 ADDED DIM 2X .610. CH'D MAT'L FROM 1018/1020 CR TO A36/1018/1020 HR.	11/15/2016	DPD	JAG			









5/13/2016

SHEET 11 OF 31

MAT'L A36/1018/1020 HR UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX + .01 ANGLES ± .5°

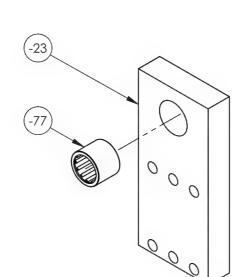
.X ± .1 SURFACES = 125/ HEAT TREAT FINISH ZINC PLATE SPEC ASTM B633 TYPE I SC 2 1. BREAK ALL SHARP EDGES .015 x 45 'OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 DRAWN BY: CLOUGH CHECKED: MACKOVJAK OPPS APPR: ANDERSON QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT H175

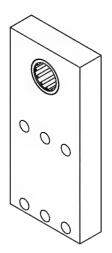
SCALE

1:1

END PLATE

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED







TITLE

MAIN ROTOR HEAD SLING

DWG NO. RBEM622U1005103-21 REV 2

MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CONTROL OF FRACTIONS ± 1/8

UNLESS OF HERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX ± .01 ANGLES ±.5°

X ± .1 SURFACES = 125/

1. BREAK ALL SHARP EDGES

SPEC

DRAWN BY: CLOUGH

CHECKED: MACKOVJAK

OPPS APPR: ANDERSON

SURFACES = 1
SURFA

 OPPS APPR:
 ANDERSON
 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

 QA APPR:
 LINDSAY
 USED ON MODEL

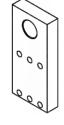
 APPROVED:
 GILBERT
 H175

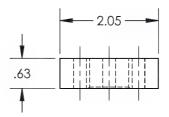
SCALE 1:2 DATE 5/13/2016 SHEET 12 OF 31

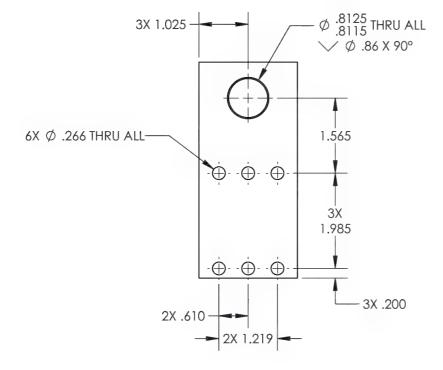
(-21)

CRANK END PLATE ASSEMBLY

			REVISIONS						
REV ECR DES	SCRIPTION	DATE	INITIAL	APPROVED					
2 16-0221 -23 CH'D MAT'L FROM 1018/1020 CR TO A36/10	018/1020 HR.	11/15/2016	DPD	JAG					









CRANK END PLATE

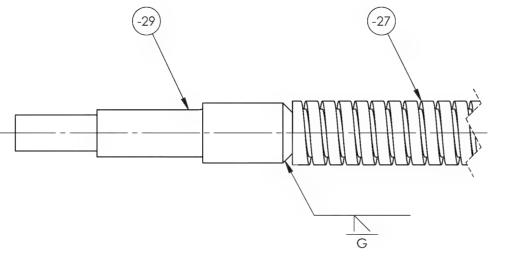


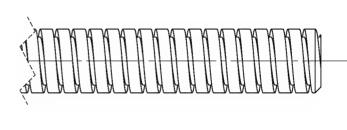
MAIN ROTOR HEAD SLING

DWG NO. RBEM622U1005103-23 RE 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	_
	,
HEAT DIMENSIONS ARE IN INCHES TREAT .XXX ± .005 FRACTIONS ± 1/8	
FINISH ZINC PLATE .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125/	/
SPEC ASTM B633 TYPE I SC 2 1. BREAK ALL SHARP EDGES	
DRAWN BY: CLOUGH .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY	
CHECKED: MACKOVJAK AFTER PLATING	
OPPS APPR: ANDERSON 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
QA APPR: LINDSAY USED ON MODEL	
APPROVED: GILBERT H175	
SCALE 1:2 DATE 5/13/2016 SHEET 13 OF 3	1

	REVISIONS .						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED		
2	16-0221	$\mbox{-25}$ Deleted -79 from assembly. Added weld symbol. Added finish zinc plate astm B633 type I SC2.	11/15/2016	DPD	JAG		







DART

TITLE

MAIN ROTOR HEAD SLING

DWG NO.

RBEM622U1005103-25

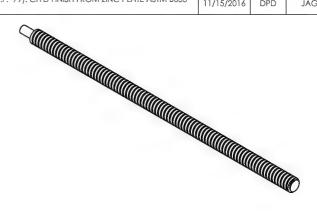
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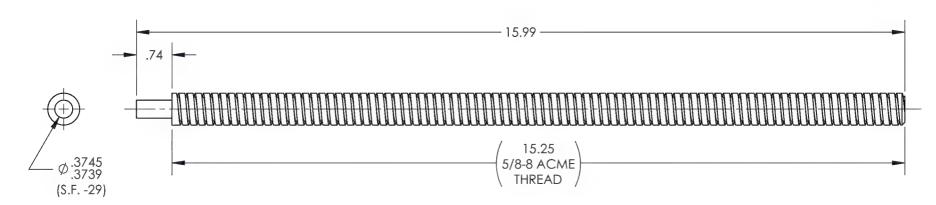
	NDL	VIOZ.	20	100010	0 20	_			
MAT'L					UNLESS OTHERWISE SPECIFIED				
HEAT TREAT				DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8					
FINISH ZINC PLATE				.XX ± .01 ANGLES ±.5° .X ± .1 SURFACES =		25/			
SPEC ASTM	SPEC ASTM B633 TYPE I SC 2			1. BREAK ALL SHARP EDGES					
DRAWN BY:	DRAWN BY: CLOUGH			.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY					
CHECKED:	MACKOVJAK		AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009						
OPPS APPR:	ANDERSON								
QA APPR:	LINDSAY		USED ON MODEL						
APPROVED:	GILBERT		H175						
SCALE	1.1	DATE	5/1	13/2016	SHEET 14 OF	31			



ACME ROD ASSEMBLY

	REVISIONS						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED		
2		-27 DELETED DIMS .365, Ø.1869-,1874 THRU ALL (P.F79), CH'D FINISH FROM ZINC PLATE ASTM B633 TYPE I SC2 TO SEE -25.	11/15/2016	DPD	JAG		







TITLE

MAIN ROTOR HEAD SLING

DWG NO.

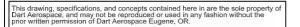
RBEM622U1005103-27

REV 2

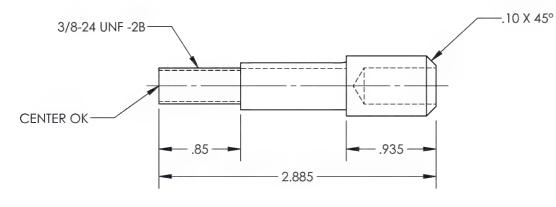
		102			2			
MAT'L STEE					UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
HEAT TREAT FINISH SEE -25				.xxx ± .005 .xx ± .01 .x ± .1				
SPEC			1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY					
DRAWN BY: CLOUGH								
CHECKED:	CHECKED: MACKOVJAK			AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009				
OPPS APPR: ANDERSON								
QA APPR: LINDSAY			USED ON MODEL					
APPROVED: GILBERT			H175					
SCALE	ALE 1.0 DATE 5/			13/2016 SHEET 15 OF 31				

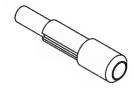
(-27

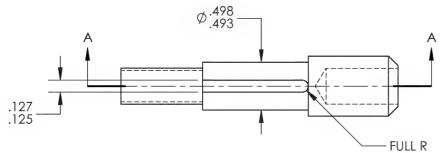
ACME ROD

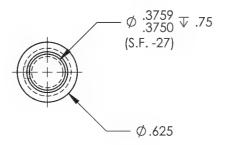


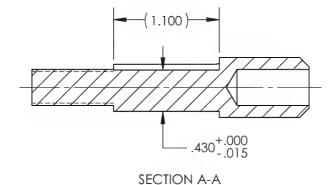
	revisions						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED		
2	16-0221	-29 DELETED DIMS .375, Ø.18901902 THRU ALL (S.F79). ADDED DIM .10 X 45°. CH'D MAT'L FROM 4140 Q&T/4142 Q&T TO 4140/4142. CH'D FINISH WAS ZINC PLATE ASTM B633 TYPE I SC2 IS SEE -25.	11/15/2016	DPD	JAG		











DART

TITLE

MAIN ROTOR HEAD SLING

DWG NO.

RBEM622U1005103-29

REV 2

MAT'L 4140/4	MAT'L 4140/4142				UNLESS OTHERWISE SPECIFIED			
HEAT RC 28-34				DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8				
FINISH SEE -25				.XX ± .01	ANGLES ±.5° SURFACES = 125/			
SPEC			1. BREAK ALL SHARP EDGES					
DRAWN BY:	CLOUGH		.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009					
CHECKED:	MACKOVJAK							
OPPS APPR:	ANDERSON							
QA APPR:	LINDSAY		USED ON MODEL					
APPROVED:	GILBERT		H175					
SCALE	1:1	DATE	5/1	3/2016	SHEET 16 OF 31			



ACME ATTACHMENT

REVISIONS This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR. DESCRIPTION INITIAL APPROVED REV ECR DATE Ø.510 .500 THRU $\emptyset.635$.570 .560



SECTION A-A

SPEC

DRAWN BY:

CHECKED:

CLOUGH

MAIN ROTOR HEAD SLING

RBEM622U1005103-31 MAT'L PLASTIC W/ STEEL HUB UNLESS OTHERWISE SPECIFIED

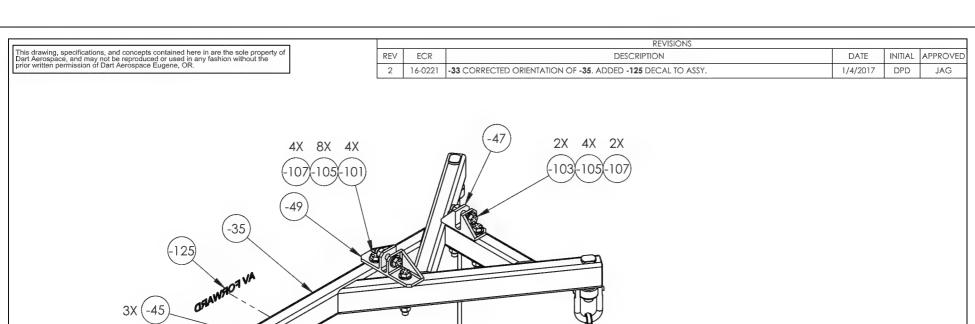
SURFACES = 125/ 1. BREAK ALL SHARP EDGES .015 x 45 'OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

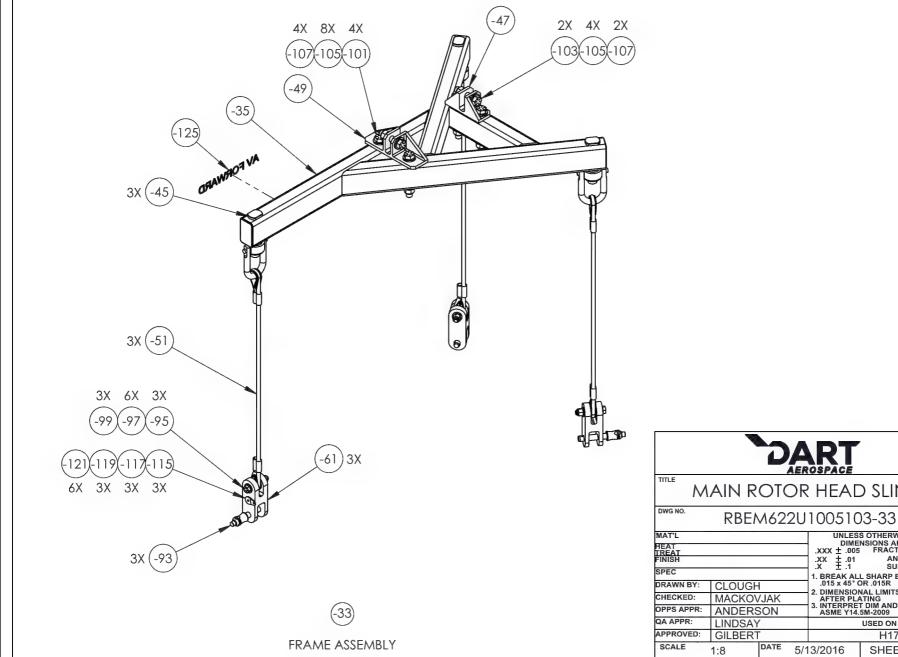
MACKOVJAK OPPS APPR: ANDERSON QA APPR: USED ON MODEL LINDSAY APPROVED: GILBERT AGUSTA AW139

SCALE 1:2 5/13/2016 **SHEET 17 OF 31**

HIDDEN LINES REMOVED

HANDWHEEL

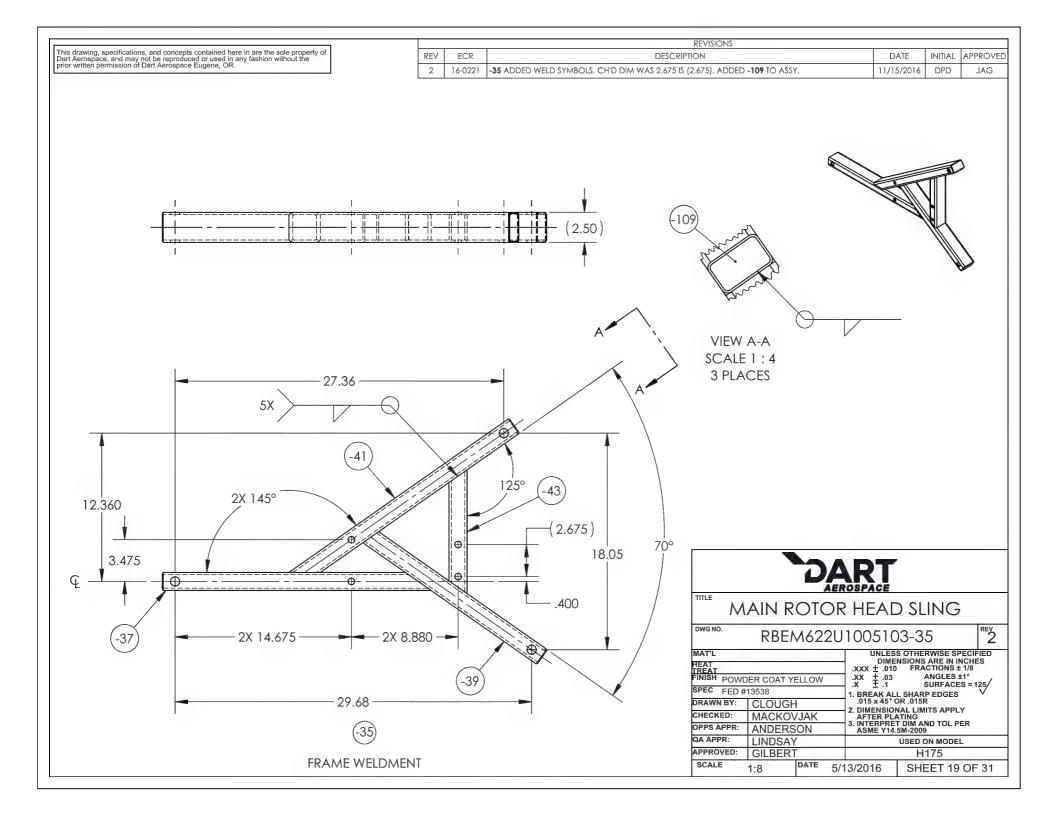


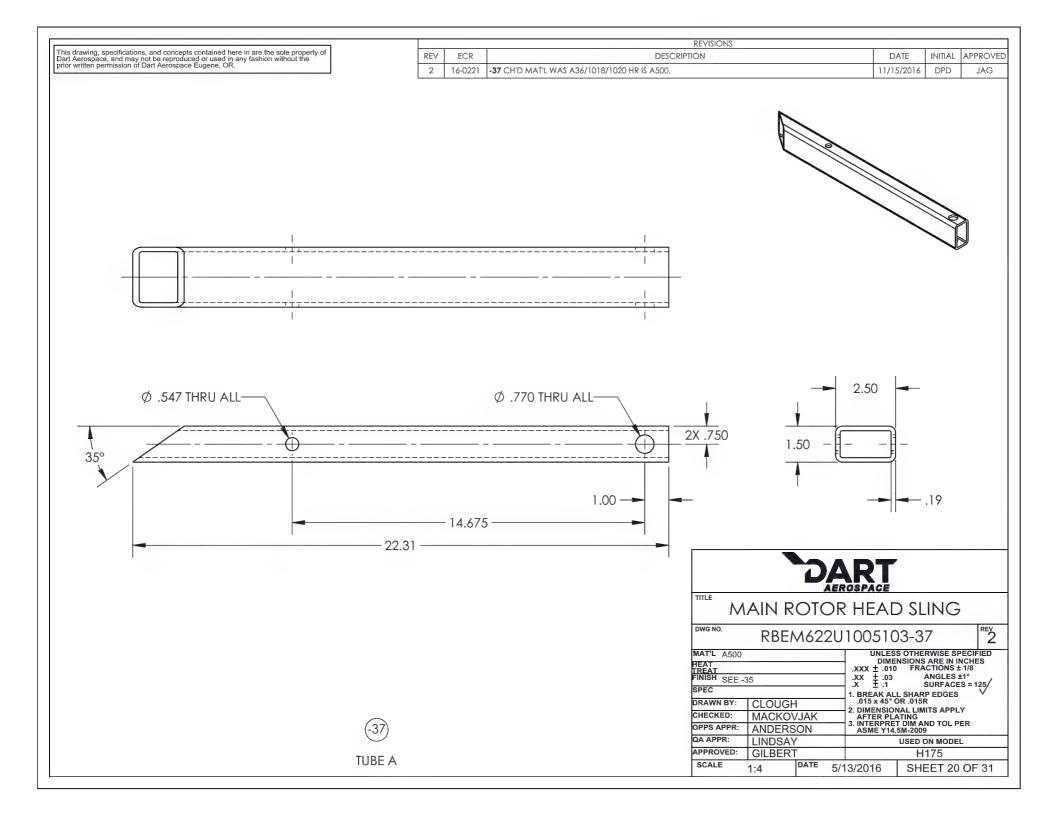


MAIN ROTOR HEAD SLING

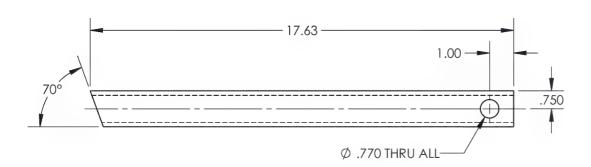
DWG NO.	RBEM622U	1005103-33	2	
MAT'L HEAT TREAT FINISH		UNLESS OTHERWISE SPECIF DIMENSIONS ARE IN INCHE .XXX ± .005 FRACTIONS ± 1/8 .XX + .01 ANGLES ± .5° .X ± .1 SURFACES = 1	s	
SPEC		1. BREAK ALL SHARP EDGES		
DRAWN BY:	CLOUGH	.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY		
CHECKED:	MACKOVJAK	AFTER PLATING		
OPPS APPR: ANDERSON		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		
QA APPR:	LINDSAY	USED ON MODEL		
APPROVED:	GILBERT	H175		

SHEET 18 OF 31

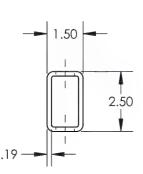




	REVISIONS						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED		
2	16-0221	-39 CH'D MAT'L FROM A36/1018/1020 HR TO A500.	11/15/2016	DPD	JAG		









MAIN ROTOR HEAD SLING

5/13/2016

RBEM622U1005103-39

1:4

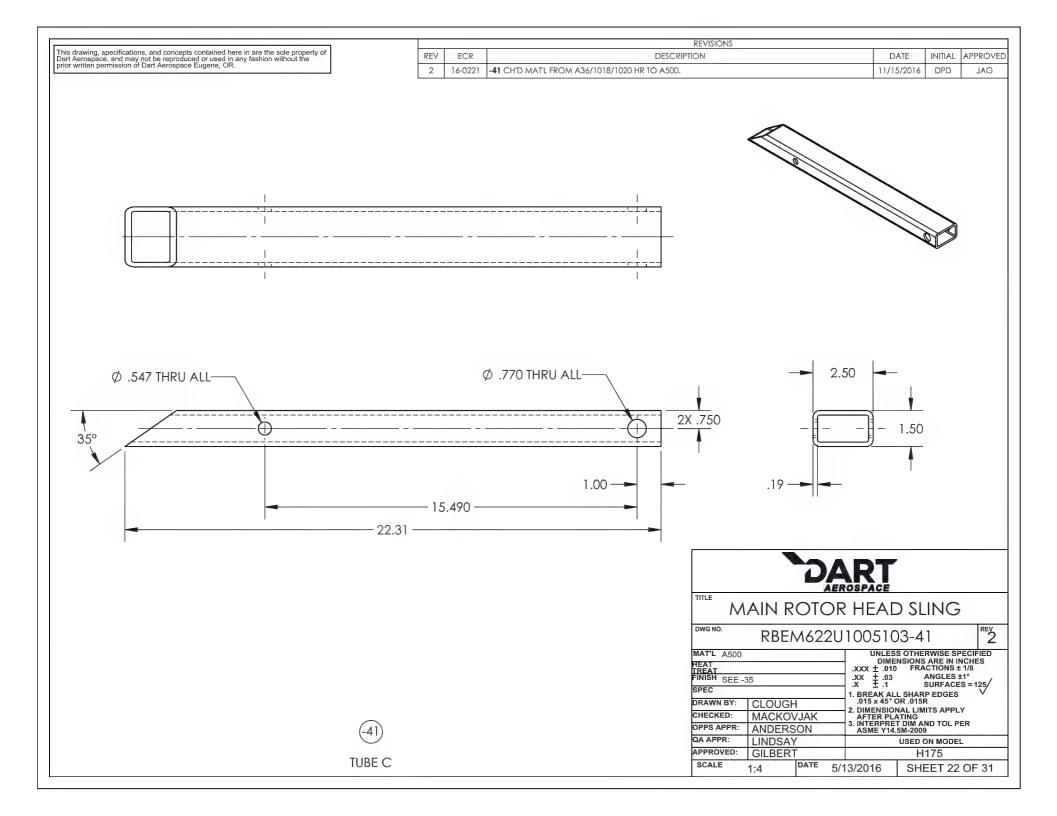
	_
ISE SPECIF	IED
E IN INCHE	S
ONS ± 1/8	
GLES ±1°	,
RFACES = 1	25/
DGES	\vee

SHEET 21 OF 31

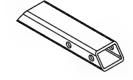
MAT'L A500					S OTHERWISE SPECI			
REAT				DIMENSIONS ARE IN INC.				
TREAT				.XXX ± .010				
FINISH SEE	35			XX ± .03 ANGLE .X ± .1 SURFA				
SPEC				1. BREAK AL	L SHARP EDGES			
DRAWN BY:	CLOUGH	1		.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY				
CHECKED:	MACKO\	/JAK		AFTER PLA	ATING			
OPPS APPR:	ANDERS	ON		ASME Y14.	T DIM AND TOL PER 5M-2009			
QA APPR:	LINDSAY	′		USED ON MODEL				
APPROVED:	GILBERT	-		H175				
SCALE	1.4	DATE	5/1	3/2016	SHEET 21 OF			

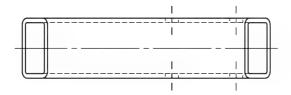


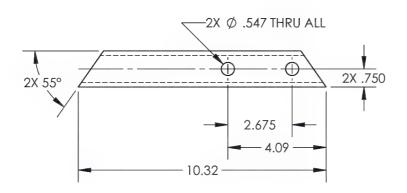
TUBE B

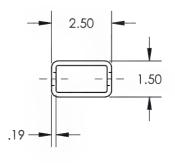


REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	16-0221	-43 CH'D MAT'L WAS A36/1018/1020 HR IS A500.	11/15/2016	DPD	JAG









SPEC

MAIN ROTOR HEAD SLING

DWG NO. RBEM622U1005103-43 MAT'L A500 HEAT TREAT FINISH SEE -35

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

.XXX ± .010 FRACTIONS ± 1/8

.XX + .03 ANGLES ±1°

X ± .1 SURFACES = 125/

A T.I.

1. BREAK ALL SHARP EDGES

.015 x 45° OR .015R

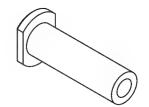
2. DIMENSIONAL LIMITS APPLY
AFTER PLATING
3. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009 DRAWN BY: CLOUGH CHECKED: MACKOVJAK OPPS APPR: ANDERSON

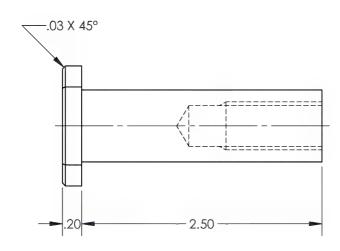
QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT H175 SCALE 1:4 5/13/2016 **SHEET 23 OF 31**

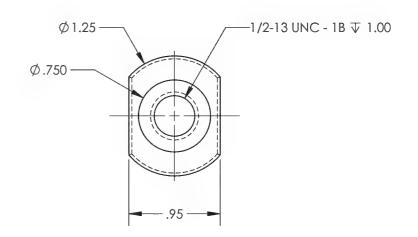
(-43)

TUBE D

		REVISIONS			
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED









TITLE

MAIN ROTOR HEAD SLING

DWG NO

RBEM622U1005103-45

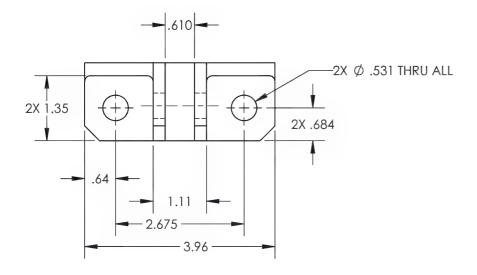
REV 2

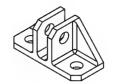
MAT'L 1018/1	020 CR				S OTHERWISE SPECIFIED	
HEAT TREAT			.xxx ± .005	NSIONS ARE IN INCHES FRACTIONS ± 1/8		
FINISH ZINC PLATE				.XX ± .01	ANGLES ±.5° SURFACES = 125/	
SPEC ASTM	B633 TYPE	SC 2		1. BREAK AL	L SHARP EDGES	
DRAWN BY:	CLOUGH		.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY			
CHECKED:	MACKOV	/JAK		AFTER PLA	ATING	
OPPS APPR:	ANDERS	SON		ASME Y14.	F DIM AND TOL PER 5M-2009	
QA APPR: LINDSA		′			USED ON MODEL	
APPROVED: GILBER		Τ		H175		
SCALE	1:1	DATE	5/1	13/2016	SHEET 24 OF 31	

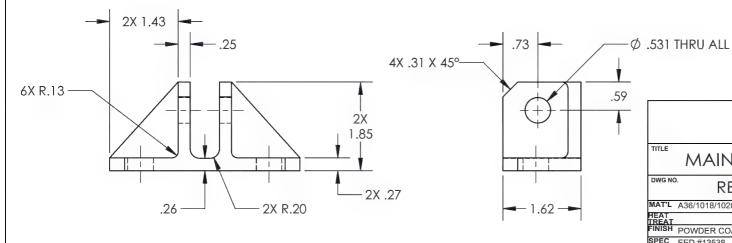


BUSHING

			REVISIONS		
REV ECR DESCRIPTION DATE INITIAL APPROVED	PE//	ECD.	DESCRIPTION	INITIAL	APPROVED





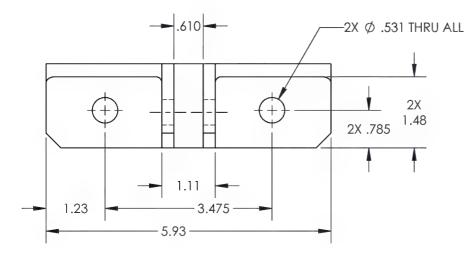


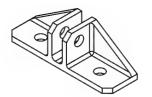
SMALL MOUNT BRACKET

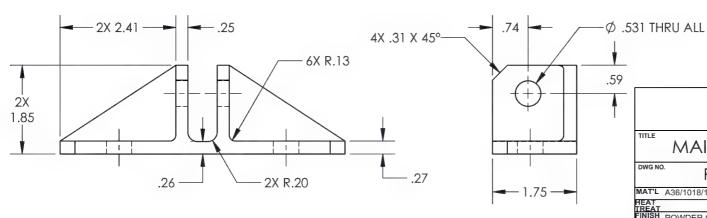
MAIN ROTOR HEAD SLING

DWG NO.	RBE	M622	2U	J1005103-47				
MAT'L A36/10	MAT'L A36/1018/1020 HR			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
HEAT TREAT	HEAT			.xxx ± .005		:8		
FINISH POWDER COAT YELLOW				.XX ± .01	ANGLES ±.5° SURFACES = 1	25/		
SPEC FED#	SPEC FED #13538			1. BREAK ALL SHARP EDGES				
DRAWN BY:	CLOUGH			.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY				
CHECKED:	MACKO\	/JAK		AFTER PLA	TING			
OPPS APPR:	ANDERS	SON		ASME Y14.	F DIM AND TÖL PER 5M-2009			
QA APPR:	′			USED ON MODEL				
APPROVED: GILBER		•			H175			
SCALE 1:2		DATE	5/1	3/2016	SHEET 25 OF	31		

		REVISIONS			
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED







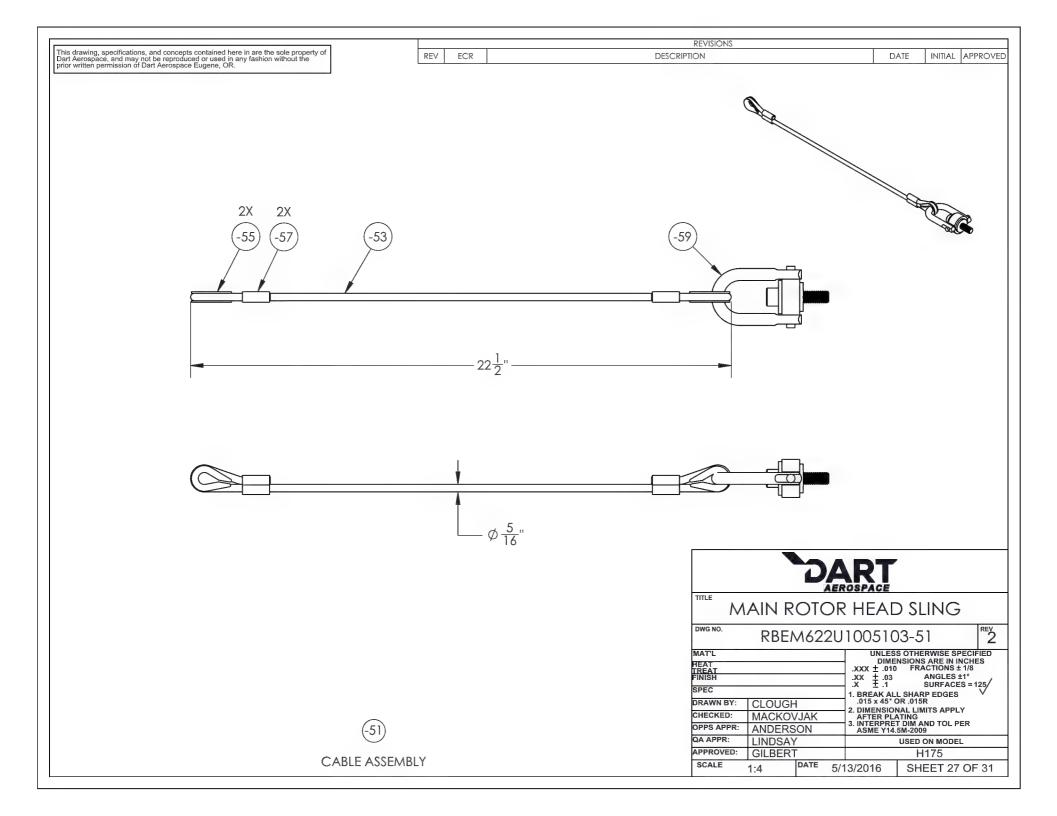
LONG MOUNT BRACKET

MAIN ROTOR HEAD SLING

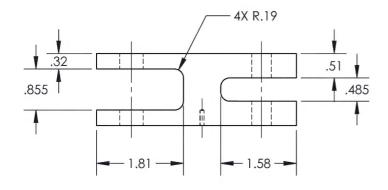
D. O. NO	RBEM622U	1005103-49
MAT'L	A36/1018/1020 HR	UNLESS OTHERWI

HEAT TREAT	18/1020 HR ER COAT YE	ELLOW				
SPEC FED #40500				1. BREAK ALI	L SHARP EDGES	
DRAWN BY: CLOUGH				.015 x 45° C		
CHECKED:	CHECKED: MACKOVJAK			- 2. DIMENSIONAL LIMITS APPLY AFTER PLATING - 3. INTERPRET DIM AND TOL PER		
OPPS APPR:	ANDERS	ON		ASME Y14.		
QA APPR:	LINDSAY	'			USED ON MODEL	
APPROVED: GILBERT					H175	
SCALE	1:2	DATE	5/1	13/2016	SHEET 26 OF 31	

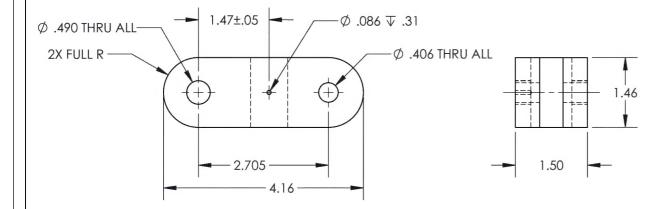
REV 2



	revisions										
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED						
2		-61 CH'D MAT'L WAS 1018/1020 CR IS 4140/4142. ADDED DIM 1.47±.05. CH'D DIMS WAS .508 IS .51, WAS Ø.095098 ₮ .15 IS Ø.086 ₮ .31.	11/15/2016	DPD	JAG						







LINK

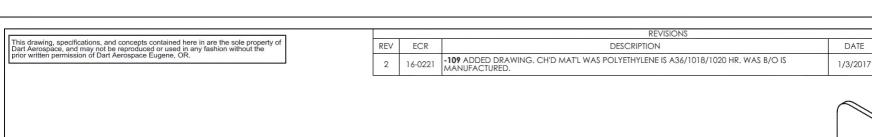
DART

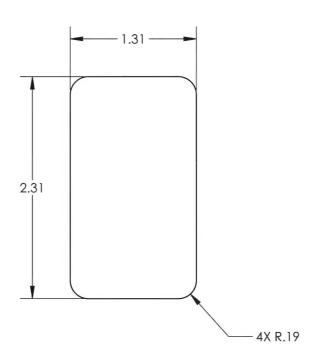
MAIN ROTOR HEAD SLING

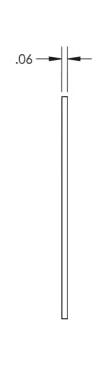
REV

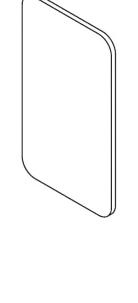
RBEM622U1005103-61

	KDEI	VIOZ	20	100510	13-01	2			
MAT'L 4140/4	1142	42			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
HEAT TREAT			.XXX ± .005	FRACTIONS ± 1/8	.5				
FINISH POWDER COAT YELLOW				.XX ± .01	ANGLES ±.5° SURFACES = 1	25/			
SPEC FED #13538				1. BREAK ALL SHARP EDGES					
DRAWN BY:	CLOUGH	1		.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY					
CHECKED:	MACKO\	/JAK		AFTER PLA	TING				
OPPS APPR:	ANDERS	SON		ASME Y14.	F DIM AND TOL PER 5M-2009				
QA APPR: LINDSAY		′		USED ON MODEL					
APPROVED:	GILBERT				H175				
SCALE	1:2	DATE	5/1	3/2016	SHEET 28 OF	31			









INITIAL APPROVED

JAG

DPD

DATE

MAIN ROTOR HEAD SLING

DWG NO. RBEM622U1005103-109

						_		
MAT'L A36/1	018/1020 HR			UNLESS OTHERWISE SPECIF				
HEAT TREAT			.xxx ± .010		3			
FINISH SEE -	35		.XX ± .03	ANGLES ±1° SURFACES = 12	25/			
SPEC				1. BREAK AL	L SHARP EDGES	V		
DRAWN BY:	CLOUGH	1		.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY				
CHECKED:	MACKO\	/JAK		AFTER PLA	ATING			
OPPS APPR:	ANDERS	ON		3. INTERPRE ASME Y14.	T DIM AND TOL PER 5M-2009			
QA APPR:	LINDSAY	(USED ON MODEL			
APPROVED:	GILBER	Γ		H175				
SCALE	1.1	DATE	5/1	3/2016	SHEET 29 OF	31		

1:1

5/13/2016

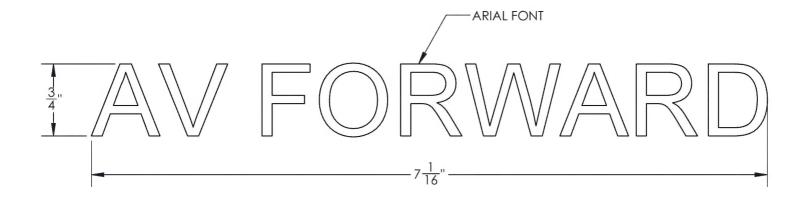
SHEET 29 OF 31



TUBE CAP

	REVISIONS REVISIONS									
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED					
2	16-0221	-125 ADDED TO BOM QTY: 1, ADDED DRAWING.	1/4/2017	DPD	JAG					





DART

TITLE

MAIN ROTOR HEAD SLING

DWG NO.

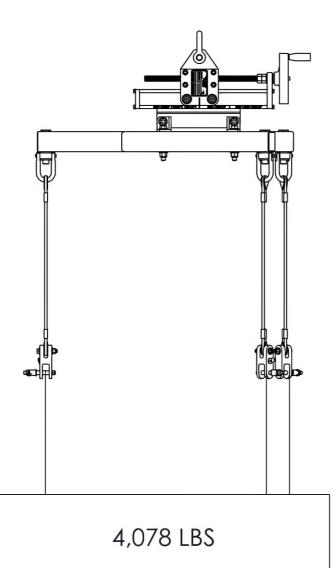
RBEM622U1005103-125

REV 2

	TO LIVIOZ		00010	0 120	_
MAT'L BLAC	K VINYL		UNLESS OTHERWISE SPECIFIED		
HEAT TREAT FINISH			.XXX ± .010 .XX ± .03 .X ± .1		
SPEC			1. BREAK ALI	L SHARP EDGES	2 5/
DRAWN BY:	DUERFELDT	-	.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY		
CHECKED:	MACKOVJAK	(AFTER PLA	TING	
OPPS APPR:	ANDERSON		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		
QA APPR:	LINDSAY		USED ON MODEL		
APPROVED:	GILBERT		H175		
SCALE	1.1 DATI	E 1/	1/2017	SHEET 30 OF	31

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DECAL



INSPECTION & TESTING PROCEDURES FOR THE RBEM622U105103, MAIN ROTOR HEAD SLING.

- INSPECT THISASSEMBLY BEFORE EACH USE.
- REPLACE ANY ITEMS THAT ARE DAMAGED OR SUSPECTED OF DAMAGE BEFORE USING!

FIRST ARTICLE WEIGHT TEST

- 1. AFTER INSPECTION, ATTACH SLING ASSEMBLY TO AN OVERHEAD LIFTING DEVICE.
- 2. ATTACH SLING TO AN APPROPRIATE TEST WEIGHT OF 4,078 LBS. ADJUST THE POSITION OF THE SLING IF NECESSARY TO ENSURE THAT THE SLING REMAINS LEVEL.
- 3. LIFT WEIGHT FOR AT LEAST 5 MINUTES, CONTINUALLY CHECKING FOR CRACKS, DEFLECTION, OR DISTORTION.
- 4. REMOVE WEIGHT AND RE-INSPECT SLING, CHECKING FOR STRESS CRACKS, BENDING, OR DISTORTIONS.

INSPECTOR:		—
TESTER:		_
S/N:		_
DATE:		



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MAIN ROTOR HEAD SLING

RBEM622U1005103 SCALE

CUSTOMER 1 OF 1

1:12

DATE 5/13/2016 SHEET

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